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May 21, 2004

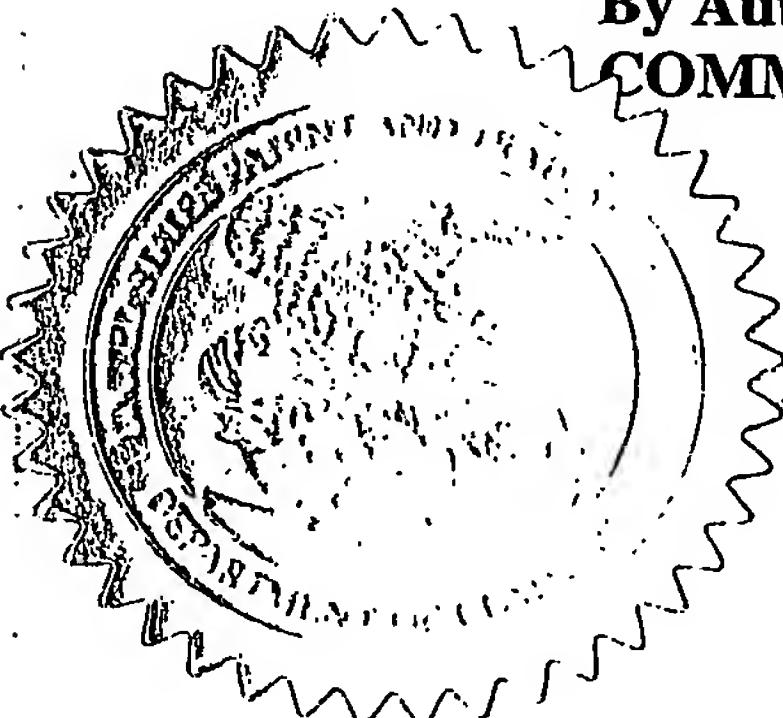
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APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A
FILING DATE.

APPLICATION NUMBER: 60/495,654

FILING DATE: August 15, 2003

RELATED PCT APPLICATION NUMBER: PCT/US04/06562

By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS


N. WOODSON
Certifying Officer

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PTO/SB/16 (02-01)

Approved for use through 10/31/2002, OMB 0651-0032
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE**PROVISIONAL APPLICATION FOR PATENT COVER SHEET**

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

Express Mail Label No. EL 995079263 US

INVENTOR(S)

Given Name (first and middle [if any]) Carl	Family Name or Surname Christensen	Residence (City and either State or Foreign Country) South Jordan, Utah USA
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 Additional inventors are being named on the next separately numbered sheets attached hereto**TITLE OF THE INVENTION (280 characters max)****BROADCAST ROUTER WITH MULTIPLE EXPANSION CAPABILITIES****CORRESPONDENCE ADDRESS**

Direct all correspondence to:

 Customer NumberPlace Customer Number
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Individual Name

JOSEPH S. TRIPOLI, THOMSON MULTIMEDIA LICENSING INC.

Address

PATENT OPERATIONS.

Address

P. O. BOX 5312

City

PRINCETON

State

NJ

ZIP

08543-5312

Country

USA

Telephone

609-734-6805

Fax

609-734-6888

ENCLOSED APPLICATION PARTS (check all that apply) Specification Number of Pages

1

 CD(s), Number Drawing(s) Number of Sheets

1

 Other (specify) Application Data Sheet. See 37 CFR 1.76**METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)** Applicant claims small entity status. See 37 CFR 1.27. A check or money order is enclosed to cover the filing feesFILING FEE
AMOUNT (\$) The Commissioner is hereby authorized to charge filing
fees or credit any overpayment to Deposit Account Number:

07-0832

160

 Payment by credit card. Form PTO-2038 is attached.

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

 No. Yes, the name of the U.S. Government agency and the Government contract number are: _____Respectfully submitted,
SIGNATURE*Francis A. Davenport Jr.*

Date

August 15, 2003

TYPED or PRINTED NAME

FRANCIS A. DAVENPORT

REGISTRATION NO.

36,316

TELEPHONE 609 734-6805

(if appropriate)

Docket Number:

PU 030245

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C., 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

17613 U.S. PTO
60/495654

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FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 160

Complete If Known	
Application Number	N/A
Filing Date	HEREWITH
First Named Inventor	Carl Christensen
Examiner Name	N/A
Group / Art Unit	N/A
Attorney Docket No.	PU 030245

METHOD OF PAYMENT (check one)					FEE CALCULATION (continued)																																																																																																																																																																																																								
<p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:</p> <p>Deposit Account Number <input type="text" value="07-0832"/></p> <p>Deposit Account Name <input type="text" value="THOMSON multimedia Licensing Inc."/></p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p>					<p>3. ADDITIONAL FEES</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Fee (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td><input type="checkbox"/></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td><input type="checkbox"/></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td><input type="checkbox"/></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td><input type="checkbox"/></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td><input type="checkbox"/></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td><input type="checkbox"/></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td><input type="checkbox"/></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td><input type="checkbox"/></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td><input type="checkbox"/></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td><input type="checkbox"/></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td><input type="checkbox"/></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td><input type="checkbox"/></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td><input type="checkbox"/></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td><input type="checkbox"/></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td><input type="checkbox"/></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - 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SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Francis A. Davenport	Registration No. Attorney/Agent)	36,316	Telephone	609-734-6805
Signature	<i>Francis A. Davenport</i>			Date	09/15/03

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BROADCAST ROUTER WITH MULTIPLE EXPANSION CAPABILITIES

Broadcast router configurations can vary widely, for example, it can require few inputs and many outputs, many inputs and few outputs, or approximately equal inputs and outputs. Linearly expandable routers allow users to start with a smaller router and enlarge it later by adding more chassis and connecting the chassis. Supporting a wide range of differences between number of inputs and outputs and linear expansion will result in configurations where large portions of the chassis are empty. The advantageous architecture disclosed herein allows for more optimal use of the chassis in various configurations.

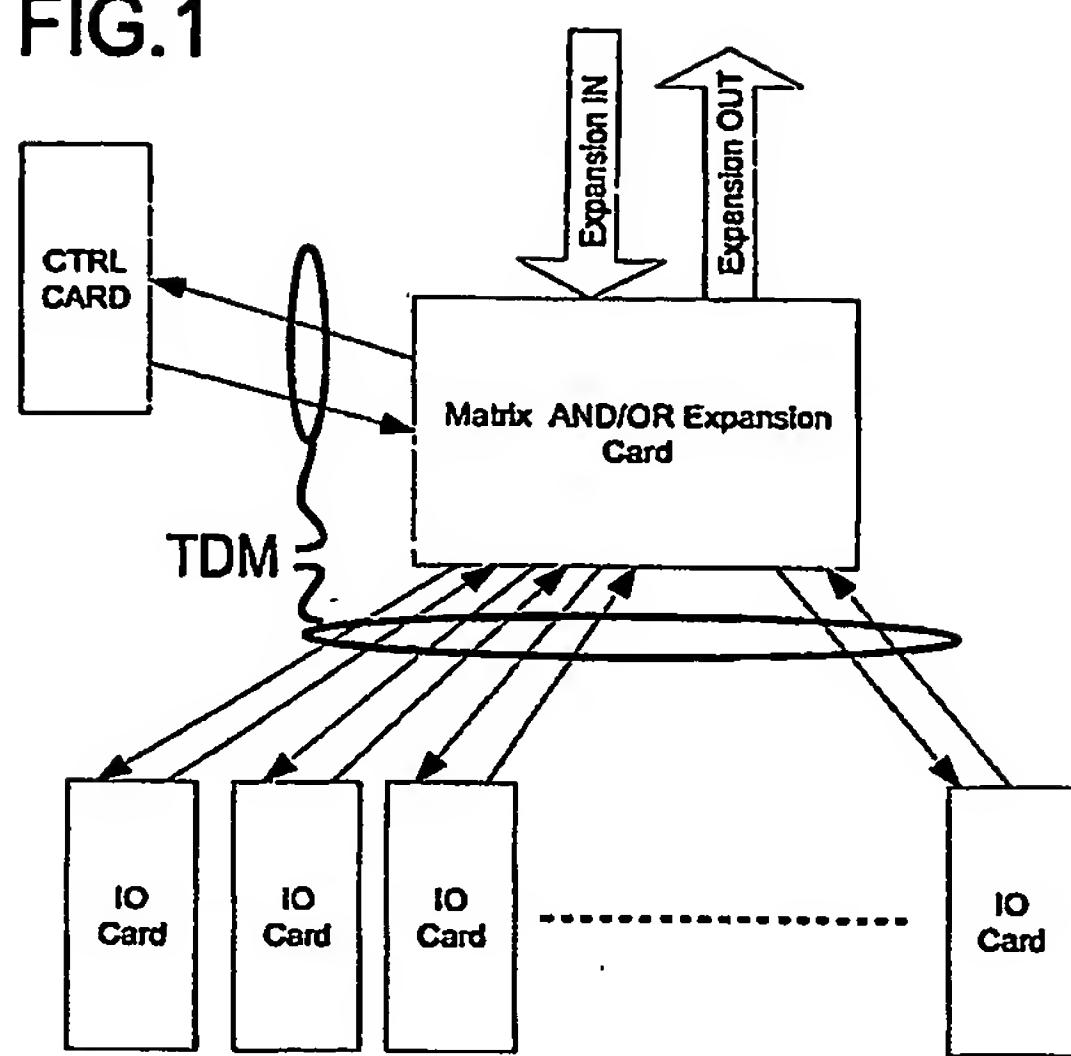
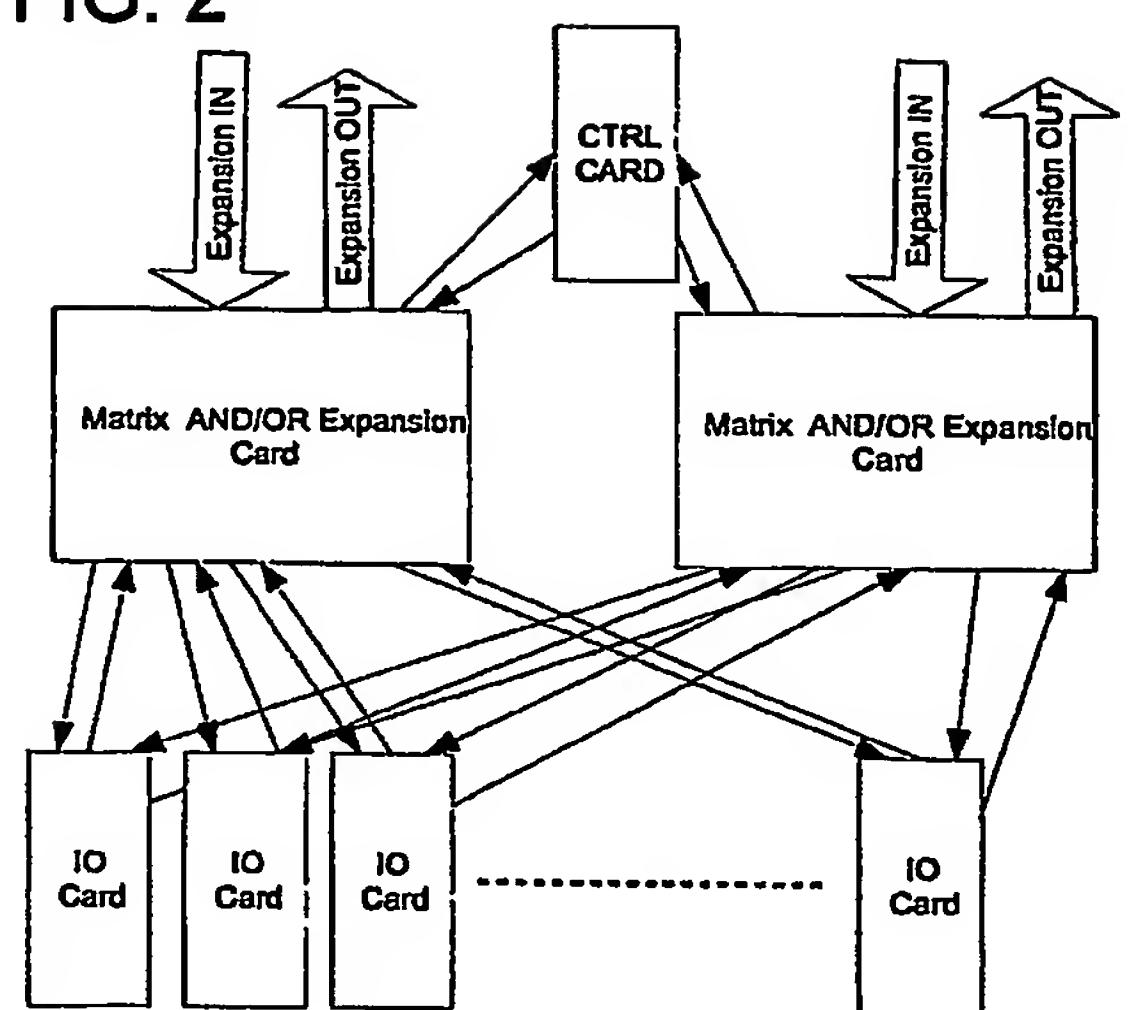
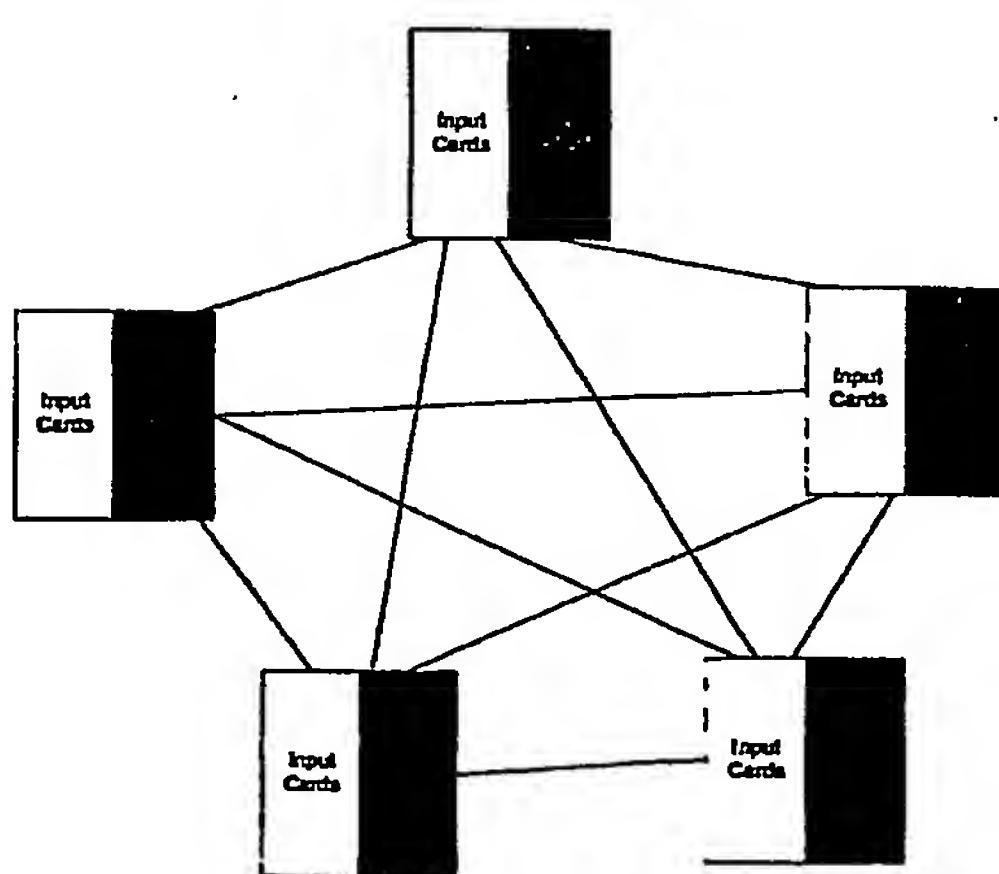
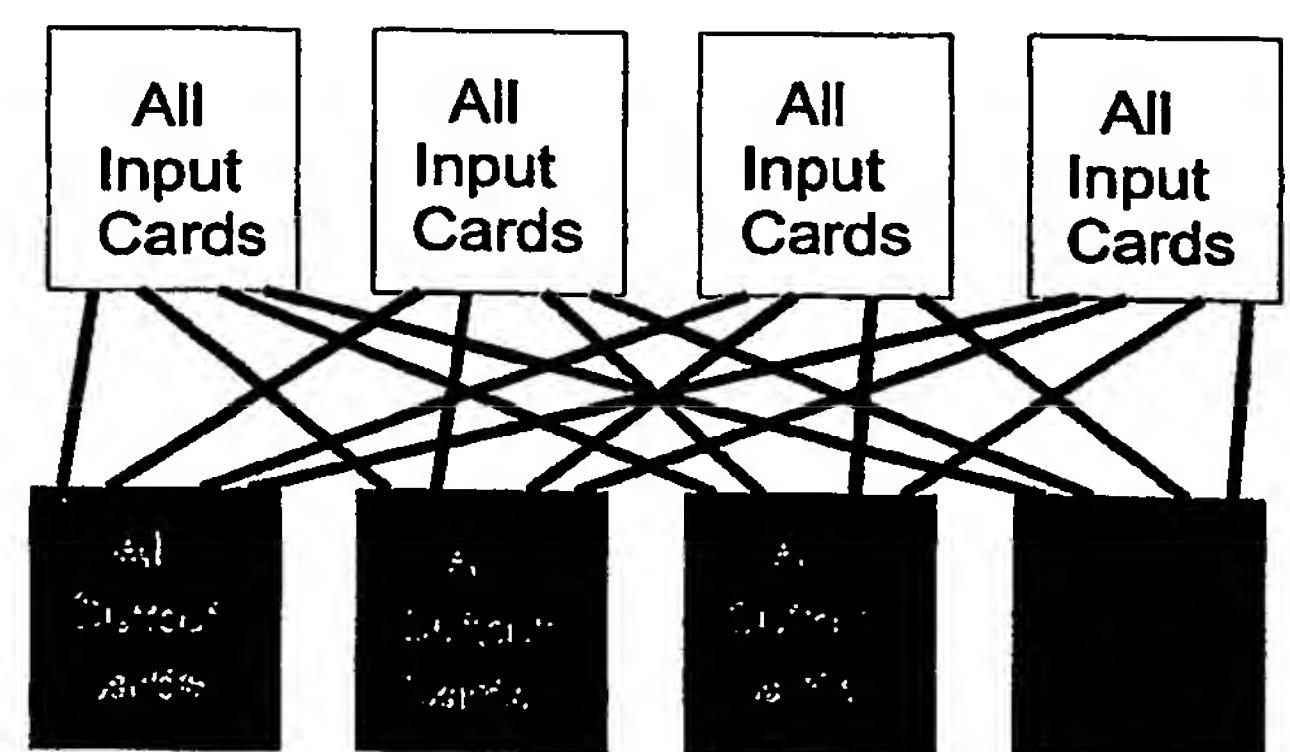
A novel architecture for a broadcast router chassis allows the same chassis to be used for two different linearly expandable router systems. In the first system, the chassis supports the same number of input and output cards per chassis. A signal chassis is a viable system and the system can grow one chassis at a time. In the second system, a chassis holds either input or output cards but not both. Thus, two chassis are required to make a system. Systems containing more input chassis than output chassis are supported as are a system with more output chassis than input chassis. The second system can be used to build larger systems, from the same chassis with the same number of expansion ports.

FIGURE 1 is a block diagram representing the functional structure of the chassis. The inclusion of TDM data paths to and from each slot to the matrix/expansion slot is new and not known in prior broadcast routers. In addition to transferring data, these TDM data paths may also be used for transferring commands, status, and system health monitoring information throughout the chassis. FIGURE 3 is an example of a full configuration in system of FIGURE 1.

FIGURE 2 depicts an alternate structure which allows for redundant matrix, expansion operations and link.

FIGURE 3 is an example of a full configuration in the system of FIGURE 1.

FIGURE 4 is an example of a full configuration in the system of FIGURE 2.

FIG.1**FIG. 2****FIG.3****FIG.4**

PATENT APPLICATION SERIAL NO. _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

08/19/2003 SCDENB031 00000023 070332 56495634
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